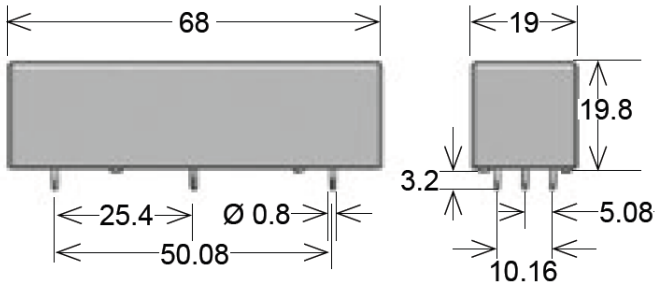
HM Series Reed Relays



- Features: High Voltage Relay, Through-Hole / Axial Wire Option, Latching Version, Special Pin-Outs
- Applications: High Voltage Test Sets, Cable Testers, Medical Equipment & Others
- Markets: Medical, Test and Measurement & Others

Part-Description: HM 00-0X00-000

Nominal Voltage	Contact QTY	Contact Form	Switch Model	Pin Out
05, 12, 24	1	A, B	69, 83	02, 03, 06, 08, 26, 20-6, 150, 300

Customer Options	Switch Model		Unit
Contact Data	**69**	**83**	
Rated Power (max.) Any DC combination of V&A not to exceed their individual max.'s	50	50	W
Switching Voltage (max.) DC or peak AC	10,000	7,500	V
Switching Current (max.) DC or peak AC	3.0	3.0	A
Carry Current (max.) DC or peak AC	5.0	5.0	A
Contact Resistance (max.) @ 0.5V & 50mA	150	150	mOhm
Breakdown Voltage (min.) According to EN60255-5	15	10	kVDC
Operating Time (max.) Incl. Bounce; Measured with w/ Nominal Voltage	3.0	3.0	ms
Release Time (max.) Measured with no Coil Excitation	1.5	1.5	ms
Insulation Resistance (typ.) Rh<45%, 100V Test Voltage	10^{12}	10^{12}	Ohm
Capacitance (typ.) @ 10kHz across open Switch	1	1	pF

Coil Data		Coil Voltage (nom.)	Coil Resistance (typ.)	Pull-In Voltage (max.)	Drop-Out Voltage (min.)	Nominal Coil Power (typ.)
Contact Form	Switch Model					
Unit		VDC	Ohm	VDC	VDC	mW
1A	69	05	30	3.8	0.5	833
		12	150	9	1	960
		24	600	18	2	960
	83	05	45	3.8	0.5	556
		12	250	9	1	576
		24	1,000	18	2	576
1B	69	05	60	3.8	0.5	556
		12	150	9	1	960
		24	1,000	18	2	576
	83	05	45	3.8	0.5	556
		12	250	9	1	576
		24	1,000	18	2	576

The Pull-In / Drop-Out Voltage and Coil Resistance will change at rate of 0.4% per °C.

Environmental Data		Unit
Shock Resistance (max.) 1/2 sine wave duration 11ms	50	g
Vibration Resistance (max.)	20	g
Operating Temperature	-20 to 70	°C
Storage Temperature	-35 to 95	°C
Soldering Temperature (max.) 5 sec. max.	260	°C

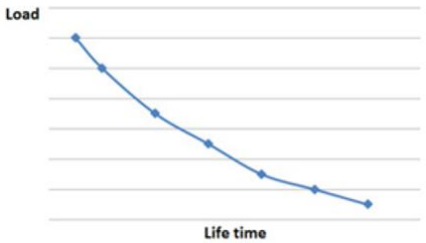
Handling & Assembly Instructions

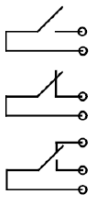
- Switching inductive and/or capacitive loads create voltage and/or current peaks, which may damage the relay. Protective circuits need to be used.
- External magnetic fields needs to be taken into consideration, including a too high packing density. This may influence the relays' electrical characteristics.
- Mechanical shock impacts e.g. dropping the relays may cause immediate or post-installation failure.
- Wave soldering: maximum 260°/5 seconds.
- Reflow soldering: Recommendations given by the soldering paste manufacturer need to be considered as well as the temperature limits of other components/processes.

HM Reed Relay

Life Test Data

*Load increase reduces life expectancy of Reed Switches



Glossary Contact Form		
Form A	NO = Normally Open Contacts SPST = Single Pole Single Throw	
Form B	NC = Normally Closed Contacts SPST = Single Pole Single Throw	
Form C	Changeover SPDT = Single Pole Double Throw	

REACH COMPLIANT

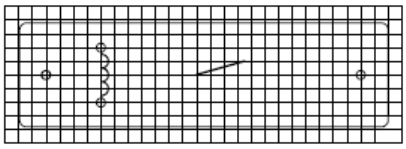
RoHS COMPLIANT

Pin Out

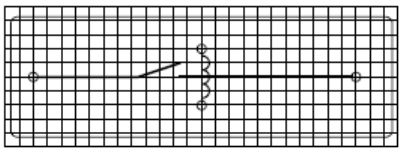
Top View

2.5mm [0.098"] pitch grid

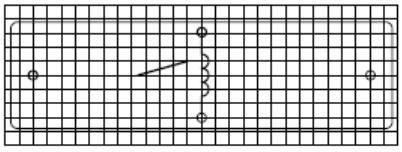
HMxx-1Axx



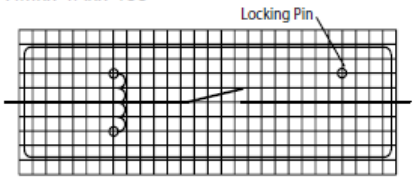
HMxx-1Axx-03



HMxx-1Axx-06

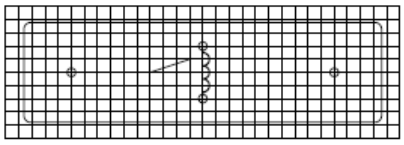


HMxx-1Axx-150

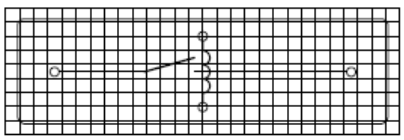


2.54mm [0.100"] pitch grid

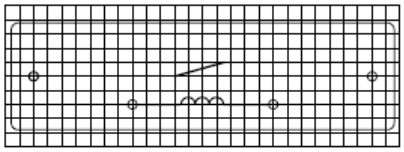
HMxx-1Axx-02



HMxx-1Axx-04

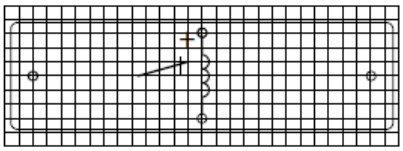


HMxx-1Axx-08



2.5mm [0.098"] pitch grid

HMxx-1Bxx-06



HMxx-1Bxx-105